22nd AIR REFUELING WING

Fall/Winter Transition Flight Safety Briefing

22 OSS/OSW
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Overview

- Area Climatology
- Fall-Winter Hazards
- Metwatch criteria
- What we provide!
- Summary

Area Climatology

Seasonal Trends

- Fall: Reduced ceilings/visibility make ops less favorable. Storms migrate south with the jet stream. Some thunderstorms are still possible.

- Winter: Cold temps /freezing precipitation impact ops.

Area Climatology

Monthly Statistical Summary

MONTH	AVG HI	AVG LOW	DAYS W/ FOG	WIND DIR/SPD	SKY COVER	MEAN PRECIP	MEAN SNOWFALL
Oct	72 F	51 F	8	S/11 KTS	SCT	2.9”	0
Nov	58 F	38 F	11	S/11 KTS	SCT	1.7”	1.2”
Dec	45 F	28 F	11	N/11 KTS	SCT	1.2”	1.3”
Jan	40 F	24 F	11	N/11 KTS	SCT	.9”	4..4”
Feb	47 F	29 F	11	N/12 KTS	BKN	1.1”	4.3”
Mar	58 F	38 F	11	S/12 KTS	BKN	2.7”	2.4”

Fall-Winter Hazards

- Icing
- Turbulence
- Wind Shear

Fall-Winter Hazards

Icing Criteria

- Trace: Rate of accumulation greater than sublimation.
- Light: Slow accumulation requires occasional de-icing.
- Moderate: Short encounters require continuous de-icing.
- Severe: De-icing fails to reduce or control hazard

Fall-Winter Hazards

Icing is a function of temp and mois

- Temp: 0C to -20C can occur >-40C in TSTM tops
- Types of Icing associated with temps:

0C to -10C	Clear
-10C to -15C	Mixed clear and rime
-15C to -20C	Rime

- Cumulus clouds produce clear icing
- Stratus clouds produce rime icing

"Steer through clear and climb through rime!"

Fall-Winter Hazards

Turbulence Criteria

- Light: Light, erratic changes in altitude and/or attitude.

- Moderate: Greater than light with changes in airspeed
  but aircraft remains in positive control.

- Severe: Abrupt changes in altitude, attitude and airspeed.
  Control becomes difficult.

Fall-Winter Hazards

Turbulence… has numerous sources!

- Terrain--mostly down stream of features
- Clear Air Turbulence (only 75% associated w/jets)
  - Most severe to the cold side of a jet steam core.
  - Area of turbulence 2,000’ thick and 2-8 miles wide.
- Weather features… fronts or thunderstorms.

Criteria for WWA Notification

- Tornadoes, Waterspouts and Funnel Clouds DLT 10 min
- Non-Convective Winds ≥ 35-49kts DLT 90 min
- Non-Convective Winds > 50kts DLT 120 min
- General TSTMs (hail <1/2” and winds < 35kts) DLT 90 min
- Moderate TSTMs (hail ½-5/8” and/or gusts 35-49kts) DLT 90 min
- Severe TSTMs (hail ≥ ¾” and/or gusts ≥ 50kts) DLT 120 min
- Heavy rain > =2” within 12 hrs DLT 90 min
- Heavy Snow >=2” within 12 hrs DLT 90 min
- Freezing precipitation DLT 90 min

DLT is Desired Lead Time

What we provide!

- PMSV: KIAB Freq 375.2 Mhz
  Please provide PIREPs!!!
  Include location, hazards, winds, temp, type of aircraft
- Coordinate advisories & warnings
- Briefer always on duty (open 24/7)
- FWB at: Commercial 318-456-4775 / DSN 781-4775 or on the 26OWS Web Page:
- https://ows.barksdale.af.mil/aircrew/setup
- Toll Free Line: 1-866-223-9328

Summary

- Area Climatology
- Fall-Winter Hazards
- Weather Hazard Criteria
- What we provide!
- Questions?